

What is claimed is:

1. An utility cart lifting platform for eliminating bending when loading and unloading utility carts. comprising:

means for providing a stationary frame.;

means for providing electrical power for a dc motor.;

means for providing control for electrical motors., switchably connected to said means for providing electrical power for a dc motor.;

means for lifting the contents of a cart.;

means for protecting moving parts of lifting platform apparatus., rigidly connected to said means for providing a stationary frame.;

means for accomodating dc motor and worm gear assembly.;

means for providing support for the tubes.;

means for providing support for worm gear.;

means for connecting platform with power tube., tangentially connected to said means for lifting the contents of a cart.;

means for connecting platform to powered tube.,

tangentially connected to said means for lifting the contents of a cart.;

means for providing safe and secure attachment for the battery.;

means for accurate chain transmission from the power tube to the powered tube.;

means for accomodate chain roller.;

means for dc motor speed reduction and torque increase.;

means for lifting one side of the platform by winding canvas "a" attached to it., rotatably connected to said means for accurate chain transmission from the power tube to the powered tube., securely connected to said means for connecting platform with power tube., and rotatably connected to said means for providing a stationary frame.;

means for lifting the other side of the platform by winding canvas "b" attached to it., rotatably connected to said means for accurate chain transmission from the power tube to the powered tube., securely connected to said means for connecting platform to powered tube., and rotatably connected to said means

for providing a stationary frame.;

means for lifting platform to operate in cordless mode, providing tubes to rotate clockwise and counterclockwise., rigidly connected to said means for lifting one side of the platform by winding canvas "a" attached to it., and switchably connected to said means for providing control for electrical motors.;

means for providing rotations for the power tube and by means of chain transmission to the powered tube.;

means for providing rotations for the powered tube when chain transmission is not used.;

means for providing support and rotations for the tubes.;

means for connecting an electrical motor dc with the battery and the electrical switch.;

means for providing electrical power for the electrical tubular motors.;

means for providing connection between the tube and the bearing.;

means for transferring rotations from the motor shaft to the tube and make the tube rotate.;

means for providing rotatably snug fit of the tubular motor inside the tubes.;

means for providing stationary support for the electrical tubular motor head and the tube.; and

means for the frame to sit securely on top rim of the cart.

2. The utility cart lifting platform in accordance with claim 1, wherein said means for providing a stationary frame. comprises a metal, made to fit any size of a cart frame.

3. The utility cart lifting platform in accordance with claim 1, wherein said means for providing electrical power for a dc motor. comprises a dry, deep cycle battery pack.

4. The utility cart lifting platform in accordance with claim 1, wherein said means for lifting the contents of a cart. comprises a flat, lightweight, washable platform.

5. The utility cart lifting platform in accordance with claim 1, wherein said means for connecting platform with power tube. comprises a fabric, washable canvas "a".

6. The utility cart lifting platform in accordance with claim 1, wherein said means for connecting platform to powered tube. comprises a fabric, washable canvas "b".

7. The utility cart lifting platform in accordance with claim 1, wherein said means for accurate chain transmission from the power tube to the powered tube. comprises a steel chain roller.

8. The utility cart lifting platform in accordance with claim 1, wherein said means for accommodate chain roller. comprises a steel sprocket.

9. The utility cart lifting platform in accordance with claim 1, wherein said means for dc motor speed reduction and torque increase. comprises a cast aluminum, variable ratio worm gear.

10. The utility cart lifting platform in accordance with claim 1, wherein said means for lifting platform to operate in cordless mode, providing tubes to rotate clockwise and counterclockwise. comprises a micro motor, high speed electrical dc motor .

11. The utility cart lifting platform in accordance with claim 1, wherein said means for providing rotations for the power tube and by means of chain transmission to the powered tube. comprises a fits inside the tube, with built-in limit switches, high torque, thermal protection from overload electrical ac tubular motor 1.

12. The utility cart lifting platform in accordance with claim 1, wherein said means for providing rotations for the powered tube when chain transmission is not used. comprises a fits inside the tube, with built-in limit switches, high torque, thermal protection against overload electrical ac tubular motor 2.

13. The utility cart lifting platform in accordance with claim 1, wherein said means for providing electrical power for the electrical tubular motors. comprises a flexible electrical cord.

14. The utility cart lifting platform in accordance with claim 1, wherein said means for providing connection between the tube and the bearing. comprises a fits diferent sizes of the tubes idler.

15. The utility cart lifting platform in accordance with claim 1, wherein said means for transferring rotations from

the motor shaft to the tube and make the tube rotate.
comprises a fits inside different sizes of the tubes drive.

16. The utility cart lifting platform in accordance with claim 1, wherein said means for providing rotatably snug fit of the tubular motor inside the tubes. comprises a fits different sizes of the tubes crown.

17. An utility cart lifting platform for eliminating bending when loading and unloading utility carts.
comprising:

 a metal, made to fit any size of a cart frame,
for providing a stationary frame.;

 a dry, deep cycle battery pack, for providing
electrical power for a dc motor.;

 a rocker, momentary electrical switch, for
providing control for electrical motors., switchably
connected to said battery pack;

 a flat, lightweight, washable platform, for
lifting the contents of a cart.;

a metal, plastic protective cover, for protecting moving parts of lifting platform apparatus., rigidly connected to said frame;

a metal worm gear and dc motor box, for accomodating dc motor and worm gear assembly.;

a metal, attached to the frame brackets, for providing support for the tubes.;

a metal box bracket, for providing support for worm gear.;

a fabric, washable canvas "a", for connecting platform with power tube., tangentially connected to said platform;

a fabric, washable canvas "b", for connecting platform to powered tube., tangentially connected to said platform;

a plastic, klik-in connection battery dock, for providing safe and secure attachment for the battery.;

a steel chain roller, for accurete chain transmision from the power tube to the powered tube.;

a steel sprocket, for accomodate chain roller.;

a cast aluminum, variable ratio worm gear, for dc motor speed reduction and torque increase.;

a metal power tube, for lifting one side of the platform by winding canvas "a" attached to it., rotatably connected to said chain roller, securely connected to said canvas "a", and rotatably connected to said frame;

a metal powered tube, for lifting the other side of the platform by winding canvas "b" attached to it., rotatably connected to said chain roller, securely connected to said canvas "b", and rotatably connected to said frame;

a micro motor, high speed electrical dc motor , for lifting platform to operate in cordless mode, providing tubes to rotate clockwise and counterclockwise., rigidly connected to said power tube, and switchably connected to said electrical switch;

a fits inside the tube, with built-in limit switches, high torque, thermal protection from overload electrical ac tubular motor 1, for providing rotations for the power tube and by means of chain transmission to the powered tube.;

a fits inside the tube, with built-in limit

switches, high torque, thermal protection against overload electrical ac tubular motor 2, for providing rotations for the powered tube when chain transmission is not used.;

a selfaligning, flange bearing, for providing support and rotations for the tubes.;

a flexible electrical wires, for connecting an electrical motor dc with the battery and the electrical switch.;

a flexible electrical cord, for providing electrical power for the electrical tubular motors.;

a fits diferent sizes of the tubes idler, for providing connection between the tube and the bearing.;

a fits inside different sizes of the tubes drive, for transferring rotations from the motor shaft to the tube and make the tube rotate.;

a fits different sizes of the tubes crown, for providing rotatably snug fit of the tubular motor inside the tubes.;

a metal, atached to the frame bracket motor head bracket, for providing stationary support for the

lectrical tubular motor head and the tube.; and
a metal, attached to the frame "u" locks, for
the frame to sit securely on top rim of the cart.

18. An utility cart lifting platform for eliminating
bending when loading and unloading utility carts.
comprising:

a metal, made to fit any size of a cart frame,
for providing a stationary frame.;

a dry, deep cycle battery pack, for providing
electrical power for a dc motor.;

a rocker, momentary electrical switch, for
providing control for electrical motors., switchably
connected to said battery pack;

a flat, lightweight, washable platform, for
lifting the contents of a cart.;

a metal, plastic protective cover, for
protecting moving parts of lifting platform aparatus.,
rigidly connected to said frame;

a metal worm gear and dc motor box, for
accomodating dc motor and worm gear assembly.;

a metal, attached to the frame brackets, for providing support for the tubes.;

a metal box bracket, for providing support for worm gear.;

a fabric, washable canvas "a", for connecting platform with power tube., tangentially connected to said platform;

a fabric, washable canvas "b", for connecting platform to powered tube., tangentially connected to said platform;

a plastic, klik-in connection battery dock, for providing safe and secure attachment for the battery.;

a steel chain roller, for accurate chain transmission from the power tube to the powered tube.;

a steel sprocket, for accommodate chain roller.;

a cast aluminum, variable ratio worm gear, for dc motor speed reduction and torque increase.;

a metal power tube, for lifting one side of the platform by winding canvas "a" attached to it., rotatably connected to said chain roller, securely connected to said canvas "a", and rotatably connected to said frame;

a metal powered tube, for lifting the other side of the platform by winding canvas "b" attached to it., rotatably connected to said chain roller, securely connected to said canvas "b", and rotatably connected to said frame;

a micro motor, high speed electrical dc motor , for lifting platform to operate in cordless mode, providing tubes to rotate clockwise and counterclockwise., rigidly connected to said power tube, and switchably connected to said electrical switch;

a fits inside the tube, with built-in limit switches, high torque, thermal protection from overload electrical ac tubular motor 1, for providing rotations for the power tube and by means of chain transmission to the powered tube.;

a fits inside the tube, with built-in limit switches, high torque, thermal protection against overload electrical ac tubular motor 2, for providing rotations for the powered tube when chain transmission is not used.;

a selfaligning, flange bearing, for providing

support and rotations for the tubes.;

a flexible electrical wires, for connecting an electrical motor dc with the battery and the electrical switch.;

a flexible electrical cord, for providing electrical power for the electrical tubular motors.;

a fits diferent sizes of the tubes idler, for providing connection between the tube and the bearing.;

a fits inside different sizes of the tubes drive, for transferring rotations from the motor shaft to the tube and make the tube rotate.;

a fits different sizes of the tubes crown, for providing rotatably snug fit of the tubular motor inside the tubes.;

a metal, atached to the frame bracket motor head bracket, for providing stationary support for the lectrical tubular motor head and the tube.; and

a metal, attached to the frame "u" locks, for the frame to sit securely on top rim of the cart.